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Example 5

This Example provides the ingredient listing for Comparative Example 4. Comparative Example 4 contains the following ingredients: water, glycerin, sorbitol, propylene glycol, poloxamer 407, monosodium phosphate, sodium benzoate, disodium phosphate, flavor, cetylpyridinium chloride, sodium fluoride, sodium saccharin, FD&C green no. 3, and FD&C yellow no. 5.

Example 6

This Example provides the ingredient listing for Comparative Example 5. Comparative Example 5 contains the following ingredients: water, sorbitol solution, monosodium phosphate, poloxamer 338, flavor, potassium sorbate, phosphoric acid, sodium fluoride, polysorbate 20, FD&C blue no. 1.

Example 7

This Example provides the ingredient listing for Comparative Example 6. Comparative Example 6 contains the following ingredients: water, alcohol, benzoic acid, poloxamer 407, sodium benzoate, caramel color, eucalyptol, menthol, methyl salicylate, and thymol.

Example 8

This Example provides the ingredient listing for Comparative Example 7. Comparative Example 7 contains the following ingredients: calcium disodium EDTA, cetylpyridinium chloride, disodium phosphate, flavor, green 3, menthol, methyl salicylate, poloxamer 407, polysorbate 20, potassium sorbate, propylene glycol, sodium benzoate, sodium phosphate, sodium saccharin, sorbitol, water, yellow 5, and sodium fluoride.

Example 9

The viscoelastic, shear thinning behavior of an exemplary composition of the present invention was characterized using rheology, in a conventional stress-control rheometer using a cone and plate geometry. Typically, one of the rheological methods commonly used to characterize a solution as viscoelastic and shear thinning is a flow curve, which is a measure of the viscosity as a function of shear rate. Flow measurements were taken, in the shear rate range 0.1-100 sec⁻¹ for the various products analyzed here.

The shear thinning behavior can be quantified by fitting the flow curve to a power law function and looking at the Flow Rate Index ("n"). The flow rate index for a Newtonian fluid like water is 1, while for shear thinning fluids n<1. The Flow Rate Index of natural saliva is approximately 0.4.

Compositions of the present invention have a Flow Rate Index between 0.1 and 0.8, and preferably between 0.3 and 0.6. Additionally, the overall viscosity index, also called the consistency index ("k") is two orders of magnitude higher for compositions of the present invention than for Comparative Examples 1 and 2, or water. The combination of a Flow Rate Index less than 1 (preferably less than 0.85), and a Consistency Index greater than 10, allows compositions of the present invention to provide a unique mouthfeel—due, in part, to the deposition of the polymer film onto an oral surface—and superior dry mouth relief.

Table 2 (below) provides a comparison of the Flow Rate Indices and Consistency Indices of compositions of the

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present invention and commercially available mouthwash/rinse formulations (Comparative Examples 1 to 7). These variables are routinely used to quantify the flow behavior of Newtonian as well as viscoelastic fluids. The data described in Table 2, illustrates that the polymer systems of the present invention provide a shear thinning effect, like saliva, while the Comparative Examples behave as Newtonian fluids, much like water. Essentially, none of the Comparative Examples are shear thinning.

TABLE 2

Composition	Flow Rate Index ("n")	Consistency Index ("k")
Water (Newtonian fluid)	1	2.5
Saliva (Viscoelastic)	0.4	63.8
Example 1	0.5	163.5
Comparative Example 1	1	25.7
Comparative Example 2	1	6.8
Comparative Example 3	1	2.2
Comparative Example 4	1	2.6
Comparative Example 5	1	2.7
Comparative Example 6	1	3
Comparative Example 7	1	2.2

As those skilled in the art will appreciate, numerous changes and modifications may be made to the embodiments described herein without departing from the spirit of the invention. It is intended that all such variations fall within the scope of the appended claims.

What is claimed is:

1. An aqueous oral care composition comprising:

from 0.07 to 0.09%, by weight, xanthan gum;

from 0.07 to 0.09%, by weight, cellulose gum;

from 0.04 to 0.06%, by weight, carbomer;

from 0.001 to 1% by weight, cetyl pyridinium chloride; and

an orally acceptable aqueous carrier;

wherein the composition is a mouthwash or mouthrinse; and wherein the composition further comprises a humectant, and wherein the humectant comprises propylene glycol from 5 to 15% by weight, sorbitol from 5 to 25% by weight, and glycerin from 5 to 15% by weight; and wherein the composition has a G'/G" ratio of greater than or equal to 1; wherein G' is an elastic modulus and G" is a viscous modulus; and wherein the composition has a shear thinning effect, and wherein the composition is configured to coat the hard and soft tissue in the oral cavity so as to ameliorate the effects of dry mouth and wherein the composition does not comprise a saliva stimulating agent selected from the group consisting of citric, lactic, malic, succinic, ascorbic, adipic, fumaric and tartaric acids or combinations thereof.

2. The composition of claim 1, comprising:

about 0.08%, by weight, xanthan gum;

about 0.08%, by weight, cellulose gum; and

about 0.05%, by weight, carbomer.

3. The composition of claim 1, further comprising an antibacterial agent.

4. The composition of claim 3, wherein said antibacterial agent is a zinc ion source.

5. The composition of claim 1, further comprising one or more components selected from a fluoride ion source; a tartar control agent; a buffering agent; an abrasive; and a combination of two or more thereof.

6. The composition of claim 5, wherein at least one of the one or more components is a fluoride ion source selected from: stannous fluoride, sodium fluoride, potassium fluoride, sodium monofluorophosphate, sodium fluorosilicate, ammo-